WHAT IS CLAIMED IS:

1. A catalyst composition comprising a mixture of:(a) ceria having a weighted numerical average particle size of not greater than about 100 nm and (b) a catalytically effective amount of a platinum-group metal catalytic component disposed on a refractory metal oxide support, said catalyst composition containing substantially no organic compounds nor substantially any zirconia in the form of a composite or a solid solution with said ceria.

2. The catalyst composition of claim 1 which is disposed on a carrier.

3. The catalyst composition of claim 2 wherein the carrier is a monolithic carrier comprising a refractory ceramic or metal having a honeycomb structure.

4. The catalyst composition of claim 3 wherein the carrier comprises cordierite.

5. The catalyst composition of claim 1 wherein the ceria has a weighted numerical average particle size of about 1 to about 30 nm.

6. The catalyst composition of claim 5 wherein the ceria has a weighted numerical average particle size of 3 to 20 nm.

7. The catalyst composition of claim 2 wherein the ceria is present in an amount of about 0.01 to about 1 g/in^3 of the carrier.

8. The catalyst composition of claim 7 wherein the ceria is present in an amount of 0.04 to 0.5 g/in^3 of the carrier.

9. The catalyst composition of claim 2 wherein the platinum-group metal catalytic component comprises a palladium metal catalytic component.

10. The catalyst composition of claim 9 wherein the palladium metal catalytic component is present in an amount of about 20 to about 300 g/ft^3 of the carrier.

11. The catalyst composition of claim 10 wherein the palladium metal catalytic component is present in an amount of 50 to 200 g/ft^3 of the carrier.

12. The catalyst composition of claim 2 wherein the refractory metal oxide support is selected from the group consisting of activated alumina, silica, titania, silica-alumina, alumina-silicates, aluminum-zirconium oxide, alumina-chromia, alumina-cerium oxide and mixtures thereof.

13. The catalyst composition of claim 12 wherein the refractory metal oxide support comprises activated alumina.

14. The catalyst composition of claim 13 wherein the activated alumina is present in an amount of about 0.1 to about 4.0 g/in^3 of the carrier.

15. The catalyst composition of claim 13 wherein the activated alumina is stabilized with a lanthanum component.

16. The catalyst composition of claim 15 wherein the lanthanum component is present in an amount of about 0.02 to about 0.5 g/in^3 of the carrier.

17. The catalyst composition of claim 2 further including a binder comprising zirconia.

18. The catalyst composition of claim 17 wherein the zirconia is present in an amount of about 0.02 to about 1.5 g/in^3 of the carrier.

19. The catalyst composition of claim 2 further including a promoter comprising an alkaline earth metal compound.

20. The catalyst composition of claim 19 wherein the alkaline earth metal compound is selected from the group consisting of oxides of magnesium, barium, calcium, strontium and mixtures thereof.

21. The catalyst composition of claim 20 wherein the alkaline earth metal compound is present in an amount of about 0.02 to about 0.5 g/in^3 of the carrier.

22. An apparatus for abating pollutants contained in the exhaust of an engine comprising a catalyst member comprising a catalytic composition effective for simultaneously substantially catalyzing the oxidation of hydrocarbons and carbon monoxide and the reduction of nitrogen oxides, said catalytic composition comprising a mixture of (a) ceria having a weighted numerical average particle size of not greater than about 100 nm and (b) a catalytically effective amount of a platinum-group metal catalytic component disposed on a first refractory metal oxide support, said catalyst composition containing substantially no organic compounds nor substantially any zirconia in the form of a composite or a solid solution with said ceria.

23. The apparatus of claim 22 wherein the catalytic composition is disposed on a carrier.

24. The apparatus of claim 23 wherein the carrier is a monolithic carrier comprising a refractory ceramic or metal having a honeycomb structure.

25. The apparatus of claim 24 wherein the carrier comprises cordierite.

26. The apparatus of claim 22 wherein the ceria has a weighted numerical average particle size of about 1 to about 30 nm.

27. The apparatus of claim 26 wherein the ceria has a weighted numerical average particle size of 3 to 20 nm.

28. The apparatus of claim 23 wherein the ceria is present in an amount of about 0.01 to about 1 g/in^3 of the carrier.

29. The apparatus of claim 28 wherein the ceria is present in an amount of 0.04 to 0.5 g/in^3 of the carrier.

30. The apparatus of claim 23 wherein the refractory metal oxide support is selected from the group consisting of activated alumina, silica, titania, silica-alumina, alumina-silicates, aluminum-zirconium oxide, alumina-chromia, alumina-cerium oxide and mixtures thereof.

31. The apparatus of claim 30 wherein the refractory metal oxide comprises activated alumina.

32. The apparatus of claim 31 wherein the activated alumina is present in an amount of about 0.1 to about 4.0 g/in^3 of the carrier.

33. The apparatus of claim 31 wherein the activated alumina is stabilized with a lanthanum component.

34. The apparatus of claim 33 wherein the lanthanum component is present in an amount of about 0.02 to about 0.5 g/in^3 of the carrier.

35. The apparatus of claim 23 wherein the catalyst composition further includes a binder comprising zirconia.

36. The apparatus of claim 35 wherein the zirconia is present in an amount of about 0.02 to about 1.5 g/in^3 of the carrier.

37. The apparatus of claim 23 wherein the catalytic composition includes a promoter comprising an alkaline earth metal compound.

38. The apparatus of claim 37 wherein the alkaline earth metal compound is selected from the group consisting of oxides of magnesium, barium, calcium, strontium and mixtures thereof.

39. The apparatus of claim 38 wherein the alkaline earth metal compound is present in an amount of about 0.02 to about 0.5 g/in^3 of the carrier.

40. The apparatus of claim 23 wherein the exhaust emanates from a passenger vehicle or truck gasoline engine manifold, the catalyst member is present in a close-coupled or medium-coupled mode and the platinum-group metal catalytic component comprises a palladium metal catalytic component.

41. The apparatus of claim 40 wherein the catalyst member is present in a close-coupled mode and the palladium metal catalytic component is present in an amount of about 20 to about 300 g/ft^3 of the carrier.

42. The apparatus of claim 41 wherein the palladium metal catalytic component is present in an amount of 50 to 200 g/ft^3 of the carrier.

43. The apparatus of claim 40 wherein the catalyst member comprises one or more upstream containers present in a close-coupled and/or medium-coupled mode and the catalyst composition is present in said containers in the form of a single brick, multiple bricks or pellets.

44. The apparatus of claim 43 further comprising one or more downstream containers located downstream of the upstream containers, said downstream containers containing a catalytic material effective at least for the oxidation of hydrocarbons and comprising one or more catalytic metal components disposed on a refractory metal oxide support and further comprising an oxygen storage component.

45. The apparatus of claim 44 wherein the catalytic material is present in the downstream containers in the form of a single brick, multiple bricks or pellets.

46. The apparatus of claim 44 wherein the catalytic metal component comprises rhodium.

47. The apparatus of claim 44 wherein the catalytic metal component comprises palladium.

48. The apparatus of claim 44 wherein the oxygen storage component comprises ceria.

49. The apparatus of claim 22 further comprising an underfloor catalyst member comprising a catalytic material effective at least for the oxidation of hydrocarbons and comprising one or more catalytic metal components disposed on a second refractory metal oxide support and further comprising an oxygen storage component.

50. The apparatus of claim 49 wherein the catalytic metal component comprises rhodium.

51. The apparatus of claim 49 wherein the catalytic metal component comprises palladium.

52. The apparatus of claim 49 wherein the oxygen storage component comprises ceria.

53. A method for treating a gas comprising hydrocarbons, carbon monoxide and nitrogen oxides which comprises flowing the gas to a catalyst member comprising a catalyst composition comprising a mixture of (a) ceria having a weighted numerical average particle size of not greater than about 100 nm and (b) a catalytically effective amount of a platinum-group metal catalytic component disposed on a refractory metal oxide support and catalytically oxidizing the hydrocarbons and carbon monoxide and catalytically reducing the nitrogen oxides in the gas in the presence of the catalyst member, said catalyst composition containing substantially no organic compounds nor substantially any zirconia in the form of a composite or a solid solution with said ceria.

54. The method of claim 53 wherein the catalyst composition is disposed on a carrier.

55. The method of claim 54 wherein the carrier is a monolithic carrier comprising a refractory ceramic or metal having a honeycomb structure.

56. The method of claim 55 wherein the carrier comprises cordierite.

57. The method of claim 53 wherein the ceria has a weighted numerical average particle size of about 1 to about 30 nm.

58. The method of claim 57 wherein the ceria has a weighted numerical average particle size of 3 to 20 nm.

59. The method of claim 54 wherein the ceria is present in an amount of about 0.01 to about 1 g/in^3 of the carrier.

60. The method of claim 59 wherein the ceria is present in an amount of 0.04 to 0.5 g/in^3 of the carrier.

61. The method of claim 54 wherein the refractory metal oxide support is selected from the group consisting of activated alumina, silica, titania, silica-alumina, alumina-silicates, aluminum-zirconium oxide, alumina-chromia, alumina-cerium oxide and mixtures thereof.

62. The method of claim 61 wherein the refractory metal oxide comprises activated alumina.

63. The method of claim 62 wherein the activated alumina is present in an amount of about 0.1 to about 4.0 g/in^3 of the carrier.

64. The method of claim 63 wherein the activated alumina is stabilized with a lanthanum component.

65. The method of claim 64 wherein the lanthanum component is present in an amount of about 0.02 to about 0.5 g/in^3 of the carrier.

66. The method of claim 54 wherein the catalytic composition further includes a binder comprising zirconia.

67. The method of claim 66 wherein the zirconia is present in an amount of about 0.02 to about 1.5 g/in^3 of the carrier.

68. The method of claim 54 wherein the catalytic composition includes a promoter comprising an alkaline earth metal compound.

69. The method of claim 68 wherein the alkaline earth metal compound is selected from the group consisting of oxides of magnesium, barium, calcium, strontium and mixtures thereof.

70. The method of claim 69 wherein the alkaline earth metal compound is present in an amount of about 0.02 to about 0.5 g/in^3 of the carrier.

71. The method of claim 54 wherein the gas comprises an exhaust gas which emanates from a passenger vehicle or truck gasoline engine manifold, the catalyst member is present in a close-coupled or medium-coupled mode and the platinum-group metal catalytic component comprises a palladium metal catalytic component.

72. The method of claim 71 wherein the catalyst member is present in a close-coupled mode and the palladium metal catalytic component is present in an amount of about 20 to about 300 g/ft^3 of the carrier.

73. The method of claim 72 wherein the palladium metal catalytic component is present in an amount of 50 to 200 g/ft^3 of the carrier.

74. The method of claim 71 wherein the catalyst member comprises one or more upstream containers present in a close-coupled and/or medium-coupled mode and the catalyst composition is present in said containers in the form of a single brick, multiple bricks or pellets.

75. The method of claim 74 wherein the catalyst member further comprises one or more downstream containers located downstream of the upstream containers, said downstream containers containing a catalytic material effective at least for the oxidation of hydrocarbons and comprising one or more catalytic metal components disposed on a refractory metal oxide support and further comprising an oxygen storage component.

76. The method of claim 75 wherein the catalytic material is present in the downstream containers in the form of a single brick, multiple bricks or pellets.

77. The method of claim 75 wherein the catalytic metal component comprises rhodium.

78. The method of claim 75 wherein the catalytic metal component comprises palladium.

79. The method of claim 75 wherein the oxygen storage component comprises ceria.

80. The method of claim 77 further comprising an underfloor catalyst member comprising a catalytic material effective at least for the oxidation of hydrocarbons and comprising one or more catalytic metal components disposed on a refractory metal oxide support and further comprising an oxygen storage component.

81. The method of claim 80 wherein the catalytic metal component comprises rhodium.

82. The method of claim 80 wherein the catalytic metal component comprises palladium.

83. The method of claim 80 wherein the oxygen storage component comprises ceria.